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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-----------------|----------------------|-------------------------|------------------|
| 09/436,219 | 11/09/1999 | AKIRA NAGAE | 104721 | 6312 |
| 25944 | 7590 03/28/2003 | | | |
| OLIFF & BERRIDGE, PLC | | | EXAMINER | |
| P.O. BOX 19928 ALEXANDRIA, VA 22320 | | | BURCH, MELODY M | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3683 | |
| | | | DATE MAILED: 03/28/2003 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|---|---|---|--|--|--|--|
| Office Action Comments | 09/436,219 | NAGAE ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Melody M. Burch | 3683 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address V Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status | 6(a). In no event, however, may a reply be tim within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | ety filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133). | | | | |
| 1) Responsive to communication(s) filed on <u>27 D</u> | <u>ecember 2002</u> . | | | | | |
| 2a)⊠ This action is FINAL . 2b)☐ Thi | s action is non-final. | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims | | | | | | |
| 4)⊠ Claim(s) <u>1-7</u> is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1,4,5 and 7</u> is/are rejected. | | | | | | |
| 7)⊠ Claim(s) <u>2,3 and 6</u> is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| Application Papers | | | | | | |
| 9)☐ The specification is objected to by the Examiner | | | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. | | | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | | |
| 12) The oath or declaration is objected to by the Examiner. | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | | |
| a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) | 5) Notice of Informal F | (PTO-413) Paper No(s) Patent Application (PTO-152) | | | | |
| | | <u> </u> | | | | |

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DETAILED ACTION

Response to Amendment

1. Applicant should note that amendments to the claims filed after March 1, 2001 must comply with 37 CFR 1.121(c) which states:

(c) Claims.

- (1) Amendment by rewriting, directions to cancel or add: Amendments to a claim must be made by rewriting such claim with all changes (e.g., additions, deletions, modifications) included. The rewriting of a claim (with the same number) will be construed as directing the cancellation of the previous version of that claim. A claim may also be canceled by an instruction. (i) A rewritten or newly added claim must be in clean form, that is, without markings to indicate the changes that have been made. A parenthetical expression should follow the claim number indicating the status of the claim as amended or newly added (e.g., "amended," "twice amended," or "new"). (ii) If a claim is amended by rewriting such claim with the same number, the amendment must be accompanied by another version of the rewritten claim, on one or more pages separate from the amendment, marked up to show all the changes relative to the previous version of that claim. A parenthetical expression should follow the claim number indicating the status of the claim, e.g., amended," "twice amended," etc. The parenthetical expression "amended," "twice amended," etc. should be the same for both the clean version of the claim under paragraph (c)(1)(i) of this section and the marked up version under this paragraph. The changes may be shown by brackets (for deleted matter) or underlining (for added matter), or by any equivalent marking system. A marked up version does not have to be supplied for an added claim or a canceled claim as it is sufficient to state that a particular claim has been added, or canceled.
- (2) A claim canceled by amendment (deleted in its entirety) may be reinstated only by a subsequent amendment presenting the claim as a new claim with a new claim number.

Examiner notes that in the amendment of paper no. 27 Applicant failed to include the following changes in the marked-up version of the claims: in line 8 of claim 1 the phrase "increase from a predetermined minimum value" was changed to --increase the target deceleration from a predetermined minimum value-- and in line 11 of claim 1 the phrase "a target deceleration" was changed to --the target deceleration--.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 5, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5915801 to Taga et al. in view of JP 10-278762 (corresponding to U.S. Harada et al. 6081761 throughout the office action for column and line numbers).

Re: claims 1 and 7. Taga et al. show a device for controlling a vehicle having a vehicle body, wheels, a steering system, and a brake system, the device comprising: means for providing a first parameter quantity indicative of a rolling amount of the vehicle body or the number or revolutions of the driving wheels as disclosed in col. 4 lines 3-5, means for providing a second parameter quantity indicative of a change rate of the rolling amount of the vehicle body as disclosed in col. 7 lines 37-38, means for calculating a target deceleration of the vehicle based upon the second parameter quantity so as to increase the target deceleration from a predetermined minimum value shown in figure 8 immediately above number 0 on the y-axis to a predetermined maximum value or the target deceleration corresponding to the maximum speed of the vehicle (which is predetermined by the automobile manufacturer) along with an increase of the second parameter quantity as disclosed in col. 7 lines 31-34, and means for controlling of the brake system such that the brake system is actuated or the target deceleration is changed to accomplish the target deceleration of the vehicle when the first parameter quantity (or distance from a forward obstruction which is based on the number of revolutions of the wheels) exceeds a threshold value predetermined therefor as disclosed in col. 7 line 61- col. 8 line 4, and discloses in the last 5 lines of the abstract that the device for controlling improves vehicle drivability, but does not disclose



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that the device is used specifically for controlling over-rolling. Harada et al. teach in the last four lines of the abstract the use of a brake controlling device utilizing target deceleration control to improve vehicle drivability by preventing over-rolling of a vehicle. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the target deceleration control associated with the first and second parameters of Taga et al. to have included drivability control directed to preventing over-rolling, as taught by Harada et al., in order to provide a means of improving overall vehicle stability.

Re: claim 5. Taga et al., as modified, teach the limitation wherein the first parameter quantity is estimated to be substantially proportional to lateral acceleration of the vehicle body. See the equation between lines 17 and 20 in col. 10 of Harada et al. in which the second parameter quantity or vehicle speed v is substantially proportional to lateral acceleration Gy of the vehicle body.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Taga et al. in view of Harada et al. as applied to claim 1 above, and further in view of US Patent 5335176 to Nakamura. Nakamura teaches in equation 3 near line 55 of col. 2 the limitation wherein the second parameter quantity or vehicle speed is estimated to be substantially proportional in an inverse manner to a change rate of steering angle effected by the steering system of the vehicle. The term "proportional", as broadly claimed, may be interpreted as directly proportional or inversely proportional. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the second parameter quantity of Taga et al., as modified, to have



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been substantially proportional to a change rate of steering angle of the vehicle body, as taught by Nakamura, in order to provide an alternate means of determining vehicle speed to effect vehicle deceleration control.

Allowable Subject Matter

5. Claims 2, 3, and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the 8. examiner should be directed to Melody M. Burch whose telephone number is 703-306-4618. The examiner can normally be reached on Monday-Friday (7:30 AM-4:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on 703-308-3421. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

mmB 3/24/03 March 24, 2003

> MATTHEW C. GRAHAM PRIMARY EXAMINER GROUP 310